ABSTRACT FOR WEBINAR PRESENTATION

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MINIMIZING RISK BY UNDERSTANDING YOUR ENVIRONMENT: or "WHY USE STA® (SEDIMENT TREND ANALYSIS)?"

The movement of sediment is complex and its understanding is essential for every aspect of marine, river and lake management and development. There are many examples of costly and environmentally unfriendly mistakes as a result of a poor understanding of sediment transport. Methods commonly used are to gather in-situ process measurements (e.g., wind, wave and currents) which can then provide the data for numerical models. The latter attempts to force nature to conform to preconceived assumptions without necessarily understanding the reality of how the environment is working. Not only is it impossible to model all the processes that might be involved, it is also not possible to know how the assumed variables interact together both in time and magnitude. The only data that can provide such information are the characteristics of the sediments themselves. Sedimentary deposits indisputably reflect an integration of all the transport processes responsible for their presence. The STA® technique enables the necessary understanding of how any sedimentary environment is "working" without prior assumptions. Furthermore the results are self-validating, easily understood, and entirely defensible.